



#7

 $1^+ +$ 

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

OIPE  
 OCT 04 2002  
 PATENT & TRADEMARK OFFICE

Sheet	1	of	1
-------	---	----	---

Application Number	09/804,496
Filing Date	March 13, 2001
First Named Inventor	Kenneth P. HINCKLEY et al.
Group Art Unit	2674
Examiner Name	R. Hjerpe
Attorney Docket Number	003797.00035

[illegible][illegible]

Alh. Lane

12/12/02

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

5, no persons are required to resp

Approved for use through 10/31/2002. OMB 0651-0031

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

**Complete if Known**

Application Number	09/804,496
Filing Date	March 13, 2001
First Named Inventor	Kenneth P. HINCKLEY et al.
Group Art Unit	2674
Examiner Name	R. Hjerpe
Attorney Docket Number	003797.00035

Sheet	1	of	1
-------	---	----	---

[illegible][illegible]

Ali Zeno

05-18-03

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

**Burden Hour Statement:** This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.**

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet 1 of 3

## Complete if Known

Application Number	TBA
Filing Date	Herewith
First Named Inventor	Kenneth P. Hinckley
Group Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	03797.00035



## U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
AZ		5,793,356	345	Svancarek et al.	8/1998	
		5,812,114	345	Loop	9/1998	
		5,844,547	345	Minakuchii et al.	12/1998	
		5,914,707	345	Kono	6/1999	
		5,973,622	341	Chiang	10/1999	
		6,005,496	341	Hargreaves et al.	12/1999	
		6,016,520	710	Facq et al.	1/2000	
		5,805,144	345	Scholder et al.	9/1998	
		5,530,455	345	Gillick et al.	6/1996	
		5,828,360	345	Anderson et al.	10/1998	
		5,426,450	345	Drumm	6/1995	
		5,666,113	341	Logan	9/1997	
		5,675,361	345	Santilli	10/1997	
		5,943,052	345	Allen et al.	8/1999	
		5,635,958	345	Murai et al.	6/1997	
		5,598,527	345	Debrus et al.	1/1997	
		5,572,238	345	Krivacic	11/1998	
		5,666,499	345	Baudel et al.	9/1997	
		5,751,260	345	Nappi et al.	5/1998	
		5,798,752	146	Buxton et al.	8/1998	
		5,355,148	345	Anderson	10/1994	
		5,841,425	345	Zenz, Sr.		
		4,403,777	273	Del Principe et al.	9/1983	
		5,818,800	369	Barker	10/1998	
		5,694,153	345	Aoyagi et al.	12/1997	
		5,457,480	345	White	10/1995	
		5,977,952	345	Francis	11/1999	
		5,977,397	345	Kuo et al.	12/1990	

## FOREIGN PATENT DOCUMENTS

Examiner Initials *	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sub>6</sub>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				

Examiner Signature

*Al. Lora*

Date Considered

12/12/02

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this 

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 3

## **Complete if Known**

Application Number	TBA
Filing Date	Herewith
First Named Inventor	Kenneth P. Hinckley
Group Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	3797.00035

## **OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AZ		R. Balakrishnan et al., "The PadMouse: Facilitating Selection and Spatial Positioning for the Non-Dominant Hand", Proceedings of CHI '98, Los Angeles, California, 18-23 April 1998, pp. 9-16.	
AZ		"The Design of a GUI Paradigm based on Tablets, Two-hands and Transparency", Proceedings of Computer-Human Interaction (CHI) 1997, Atlanta, Georgia, 22-27 March 1997, pp. 35-42.	
AZ		K. Fishkin et al., "Enhanced Dynamic Queries via Movable Filters", Proceedings of CHI 1995 Conference, pp. 415-420 (as downloaded from <a href="http://www.parc.xerox.com/istl/projects/MagicLenses/DynamicQueries.html">http://www.parc.xerox.com/istl/projects/MagicLenses/DynamicQueries.html</a> on September 25, 1998, pp. 1-13).	
AZ		E. A. Bier et al., "A Taxonomy of See-through Tools", Proceedings of CHI 1994 Conferences, April 1994, Boston, Massachusetts, pp. 517-523.	
AZ		M.C. Stone et al., "The Movable Filter as a User Interface Tool" Proceedings of CHI 1994 Conference, April 1994, Boston, Massachusetts, pp. 306-312 (as downloaded from <a href="http://www.parc.xerox.com/istl/projects/MagicLenses/94CHIFilters.html">http://www.parc.xerox.com/istl/projects/MagicLenses/94CHIFilters.html</a> on September 24, 1998, pp. 1-15).	
AZ		E.A. Bier et al. "Toolglass and Magic Lenses: The See-Through Interface", Proceedings of the Annual Conference on Computer Graphics SIGGRAPH 93, Anaheim, California, 1-6 August 1993, pp. 73-80.	
AZ		W. Buxton et al., "A Study in Two-Handed Input", Proceedings of CHI '86, Boston, Massachusetts, 13-17 April 1986, pp. 321-326	
AZ		B. Buxton, "Integrating the Periphery and Context: A New Taxonomy of Telematics", Computer Systems Research Institute (CSRI, University of Toronto & Alias Research Inc., pp. 1-10, downloaded on 3/23/99 from: <a href="http://www.dgp.toronto.edu/people/room/research/papers/bg_fg/bg_fg.html">http://www.dgp.toronto.edu/people/room/research/papers/bg_fg/bg_fg.html</a> .	
AZ		W. Buxton, "Living in Augmented Reality: Ubiquitous Media and Reactive Environments", Computer Systems Research Institute, University of Toronto and Alias/Wavefront Inc., pp. 1-17, downloaded on 2/1/99 from: <a href="http://www.dgp.utoronto.ca/OTP/papers/bill.buxton/augmentedReality.html">http://www.dgp.utoronto.ca/OTP/papers/bill.buxton/augmentedReality.html</a> .	
AZ		W. Buxton et al., "A Microcomputer-based Conducting System", Computer Music Journal, Vol. 4, No. 1, Spring 1980, contents and pp. 8-21.	
AZ		Thomas G. Zimmerman et al., "Applying Electric Field Sensing to Human-Computer Interfaces," CHI '95 MOSAIC OF CREATIVITY, May 7-11, 1995, pp. 280-287.	
AZ		J.R. Smith, "Field Mice: Extracting Hand Geometry From Electric Field Measurements," IBM Systems Journal, Vol. 35, Nos. 3 & 4, 1996, pp. 587-608.	

Examiner  
Signature

*Ab. Z...*

Date  
Considered

12/12/02

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box



PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

#2  
5/14/01  
mly  
+

Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

## **Complete if Known**

Application Number	TBA
Filing Date	Herewith
First Named Inventor	Kenneth P. Hinckley
Group Art Unit	TBA
Examiner Name	TBA
Attorney Docket Number	3797.00035

Sheet 3 of 3

## **OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
AZ		Joshua Smith et al., "Electric Field Sensing for Graphical Interfaces," MIT Media Laboratory - Special Issue on Input Devices, IEEE Computer Graphics and Applications, May 1998.	
AZ		Beverly L. Harrison et al., "Squeeze Me, Hold Me, Tilt Me! An Exploration of Manipulative User Interfaces," CHI 98, April 18-23, 1998, pp. 17-24.	
AZ		Buxton, W., Hill, R., Rowley, P., "Issues and Techniques in Touch-Sensitive Tablet Input," Computer Graphics, 19(3): pp. 215-224, 1985.	
AZ		Herot, C., Weinzapfel, G., "One-Point Touch Input of Vector Information from Computer Displays," Computer Graphics, 12(3): pp. 210-216, 1978.	
AZ		Rouse, P., "Touch-Sensitive joystick," Radio & Electronics World, Fe. 1985, pp. 23-26	
AZ		Microsoft Windows User's Guide, 1992, Doc. No. PC21669-0492	
AZ		Using Windows NT Workstation 4, 2 <sup>nd</sup> Ed., 1998 QUE	
AZ		Ken Hinckley et al., "Interaction and Modeling Techniques for Desktop Two-Handed Input," Proceedings of ACM UIT'98 Symposium on User Interface Software and Technology, pp. 49-58.	
AZ		Ken Hinckley and Mike Sinclair, "Touch-Sensing Input Devices," To Appear in ACM CHI'99 Conf. On Human Factors in computing Systems	
AZ		Albrecht Schmidt, "Implicit Human Computer Interaction Through Context," Telecooperation Office (TecO), University of Karlsruhe Germany	
AZ		"Personal Computer Environmental Control Via a Proximity Sensor," IBM Technical Disclosure Bulletin, Vol. 36, No. 08, August 1993	
AZ		J. Mackinlay et al., "A Semantic Analysis of the Design Space of Input Devices", Human-Computer Interaction, Vol. 5, 1991, pp. 145-190	
AZ		S. Card et al. "A Morphological Analysis of the Design Space of Input Devices", ACM Transactions on Information Systems, Vol. 9, No. 2, April 1991, pp. 99-122.	
AZ		W. Buxton et al., "A three-state model of graphical input", Proceedings of INTERACT -90, Amsterdam, Netherlands, 1990, pp. 449-456.	

Examiner Signature

*Al. Z...*

Date Considered

12/12/02

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+